


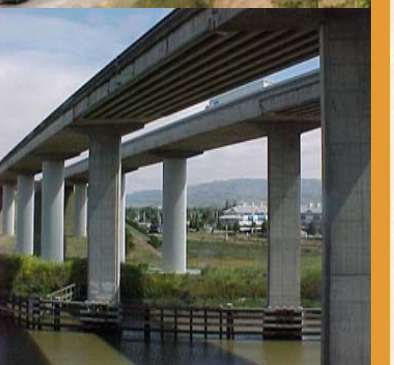

MARIN SONOMA NARROWS PROJECT

Evaluation Criteria for Interchange Alternatives

Policy Advisory Group, December 15, 2004

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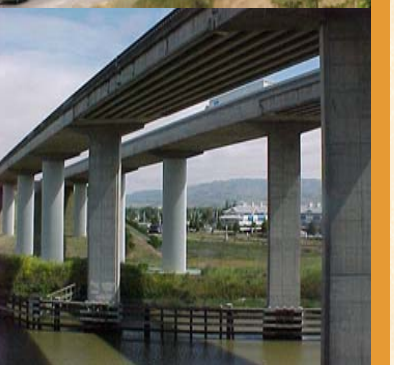
MARIN SONOMA NARROWS



Purpose of Evaluation

- Refine alternatives to avoid, minimize, or mitigate environmental impacts to greatest extent practicable
- Evaluate cost effectiveness of alternatives
- Justify further studies on alternatives

Evaluation of Interchange locations per "Access Alternatives" for Segment B of overall Project - "Expressway to Freeway Upgrade"

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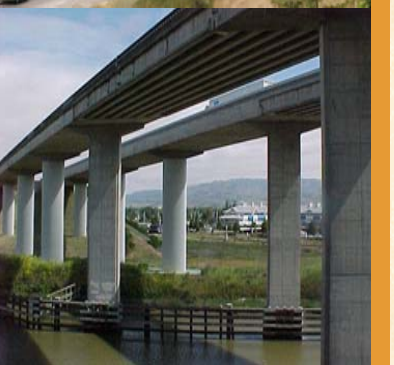

Evaluation Alternatives

- Upgrade Narrows (Segment B) from a four-lane expressway to a six-lane freeway
  - Improve traffic flow and safety through:
    - New interchanges and replacement access
    - Improved visibility
    - Wider shoulders and emergency pullouts
    - Eliminating recurrent flooding
  - Eliminate at-grade intersections and driveway access and replace with standardized interchanges and frontage roads
  - Construct continuous bicycle and pedestrian paths between Novato and Petaluma

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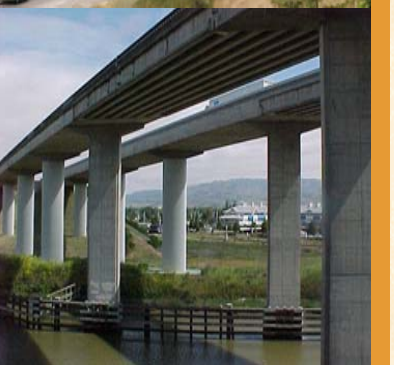

Evaluation Process

1. Define evaluation criteria
2. Determine specific measurables
3. Assign weighting to each evaluation criteria
4. Use weightings to calculate numeric score for each interchange alternative
5. Perform sensitivity analysis to confirm criteria weights
6. Use numeric scores to compare alternatives
7. Weigh environmental impacts, cost effectiveness, justification for further studies
8. Finalize studies on justified alternatives
9. Publish findings in draft environmental document
10. Circulate to public for review and selection of preferred alternative

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Evaluation Matrix

Matrix will be reviewed by Project Development Team, local partners, and Policy Advisory Group in a public forum, then forwarded to NEPA/404 contacts for interagency concurrence.

CRITERIA	WT.	DESCRIPTION
Meets Purpose and Need of Project	Y/N	Does Interchange Alternative meet Purpose/Need?
Section 4(F)	L/M/H	Provides Measure of 4(F) Impacts.
Traffic Operationally Feasible	Y/N	Is Interchange Alternative Operationally Feasible?
Right of Way Demolition	Y/N	Is Building Demolition or Relocation Assistance Required?
Access • Number of Private Parcels • Number of Residential Parcels • Number of Agricultural Parcels • Number of Commercial Parcels • Distance to Last Private Parcel • Distance to Last Residential Parcel • Distance to Last Agricultural Parcel • Distance to Last Private Parcel	7%	Measurement of how the placement of Interchange Alternatives affects access to Private Parcels that were "cut off" by converting Expressway to Freeway. Shows how far people and Emergency Vehicles will need to travel.
Sequencing • Can be Constructed Prior to Freeway	3%	Some Interchange Alternatives can be constructed prior to Freeway upgrade allowing for maximum funding flexibility.

Right of Way • Parcels Area • Number of Parcels • Number of Owners • Railroad Involvement • Complexity of Utility Involvement	10%	Provides a measure of the right-of-way impacts for an Interchange Alternative and the complexity of the negotiations that will be required.
Hazardous Waste • Number of Known Sites • Is Additional Testing Required	4%	Identifies potential hazardous waste impacts.
Potential Growth Inducement • Land Use/Zoning/Setting	10%	Measurement of how well the alternative conforms to existing land use plans and zoning ordinances of the local jurisdictions.
Visual Aesthetics • Structure Height • Structure Length • Fits with Landform	8%	Identifies how the alternative fits within the existing visual character of the area and how major viewer groups would be affected.

Watershed/Wetland Resources • Area of Direct Wetland Impact • Potential for Indirect Wetland Impact • Area of Floodplain Impact	10%	Identifies potential wetland and floodplain impacts.
Biological Resources • Number of Listed Species • Area of Habitat Impact • Tree Impact • Number of Trees Impacted • Percent of Native Trees • Percent Cover • Average Diameter at Breast Height	10%	Identifies potential biological resource impacts.
Historic Architectural Resources • Number of Eligible Properties • Number of Elements Affected • Distance from Property to Interchange • Percent of Eligible Property Taken • Visual Impact • Change of Character/Use	8%	Identifies potential historical resource impacts.

Archeological Resources • Number of Disturbed Sites • Number of Intact Sites • Number of Eligible Sites • Number of Sites with Human Remains • Number of Sites Directly Impacted • Number of Sites Indirectly Impacted	10%	Identifies potential archeological resource impacts.
Cost • Right of Way Cost • Construction Cost • Structures • Walls • Roadway • Mitigation Cost • Biology • Archeology • Historic Architecture • Total Cost	20%	Compares costs for each interchange alternative.